

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of:	)	
	)	
Amendments to Modernize and	)	
Clarify Part 17 of the Commission's	)	RM No. 11349
Rules Concerning Construction,	)	
Marking and Lighting of Antenna	)	
Structures	)	

**Comments of Crown Castle USA Inc.**

Monica Gambino  
Vice President, Legal

Sheldon Moss  
Director, Government Affairs

Crown Castle USA Inc.  
2000 Corporate Drive  
Canonsburg, PA 15317  
(724) 416-2516

November 30, 2006

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**Comments of Crown Castle USA Inc.**

Crown Castle USA Inc. ("Crown Castle"),<sup>1</sup> submits these comments in the matter of the Petition for Rulemaking ("PRM") submitted by PCIA asking the Commission to initiate a proceeding to reexamine certain issues related to compliance with the FCC's Part 17 rules. In its petition, PCIA points to several areas in Part 17 that should be updated to reflect the availability of reliable new technologies for monitoring the operation of tower lighting equipment. PCIA's petition also identifies other outdated or illogical requirements in the Part 17 rules such as the rule requiring tower owners to provide paper copies of FCC Form 854R to licensees and provides practical suggestions for ensuring there is conformity

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<sup>1</sup> Crown Castle owns and manages over 11,000 communications towers and facilities in the United States that provide a platform for the antennas and equipment needed to operate wireless communications networks. Crown Castle's customers include commercial wireless service providers, public safety network operators and other governmental agencies, private and business radio network operators, and FM radio and television broadcasters.

between the Part 17 requirements and the FAA regulations. As detailed further in these comments, Crown Castle fully supports PCIA's petition.

**I. The Elimination of the 17.47(b) Requirements for Quarterly Inspections of Remote Tower Light Monitoring Equipment Will Not Compromise the Commission's Public Safety Goals for Monitoring the Lighting of Antenna Structures**

The PCIA petition describes how 17.47(b), which requires all warning or alarm mechanisms for monitoring antenna structure lighting systems to be inspected at least every three months, does not serve any useful purpose in light of the significant advances that have been made in the technologies used to notify tower owners when tower lighting systems malfunction or are not working. Crown Castle strongly agrees.

Crown Castle manages over 6,000 structures that require some form of FAA-specified aviation lighting. The lighting mechanism at each of these towers is monitored in near real-time fashion through two-way connectivity to Crown Castle's network operations center ("NOC") in Canonsburg, Pennsylvania. The Crown Castle NOC is staffed with trained professional 24 hours a day and seven days a week. In the event of a lighting failure or outage, Crown Castle NOC staff file the appropriate NOTAM with the FAA and maintain regular communications with the FAA field service offices through the resolution of the outage event.

PCIA's petition details how dramatically the functionality and reliability of the monitoring technology has advanced since the adoption of the 17.47(b) requirement when the early monitoring systems were truly primitive. For instance,

typical early monitoring systems usually used fuse-based triggering mechanisms that could only indicate whether there is electrical current in the lines that deliver power to the light. In a related proceeding, American Tower Corporation described why fuse-based and other older monitoring technologies could be inherently unreliable. “The system would generate an alarm when the fuse would burn out. This fuse-based meter design permitted only one-way contact between monitoring system and the tower lighting, which was traditionally checked only once every twenty-four hours. This system also suffered from the fact that it was possible for a bulb to be extinguished without the fuse being tripped, and without an alarm being generated ....”<sup>2</sup>

In contrast, the NOC based systems used by Crown Castle and other tower owners and managers use technologies that are dramatically more advanced and reliable and that provide much more information about the status of each tower’s lighting system to the NOC. Most importantly, unlike older systems that rely on a single alerting criteria (for instance, whether a fuse has been tripped), today’s NOC based system use two-way and interactive communications technology that provide a continuous and real-time or near real-time ability to determine the operational status and condition of the monitoring system.

For Crown Castle, the 17.47(b) requirement imposes a considerable operational burden in that the company must schedule four separate tower site visits for each of its lighted towers. These separate visits to inspect the light monitoring mechanism are wholly unnecessary because the required quarterly

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<sup>2</sup> See Request for Waiver of 47 CFR 17.47 from American Tower Corporation; May 19, 2005; at 4-5.

inspections do not provide the company with any information that is not already available to the NOC as the technology used by Crown Castle already enables the NOC staff to determine the operational status of the monitoring system. The current requirements of 17.47(b) for quarterly inspections of the monitoring system have been surpassed by the capabilities of modern monitoring technology and as such, Crown Castle agrees with PCIA that the quarterly requirements for NOC based systems should be eliminated.

**II. There is No Longer a Compelling Need for the Commission to Require Antenna Structures Owners to Provide Licensees with a Paper Copy of Form 854R**

Crown Castle agrees with PCIA that the ready availability of ASR records (including ASR number and tower lighting and/or painting specifications) through the FCC's ASR Online System renders the requirement for structure owners to provide licensees with a paper copy of

Form 854R duplicative and unnecessary. For structure owners, it becomes a needlessly time consuming and expensive task that serves no useful purpose. At a minimum, structure owners should be obligated to provide licensees with the ASR number for the tower. Licensees may obtain the information they need from the ASR Online System.

**III. There Are Several Areas Where the Part 17 Rules Should be Harmonized with the FAA Regulations**

Crown Castle also supports PCIA's contention that Part 17 needs to be updated to eliminate conflict and potential confusion on the part of structure owners and licensees. Crown Castle supports the specific recommendations contained in the PCIA petition.

- Part 17 rules should permit the posting of the ASR numbers at the compound fence or gate as a way to satisfy the requirement that the ASR number be posted in a place that is readily visible, conspicuous and near the base of the tower.
- FAA Advisory Circular AC 70/7460-1J, effective August 1, 2000, should be referenced in 17.23.
- Section 17.57 should be amended so that the notification timelines for construction or dismantlement of antenna structures between the FAA rules and Section 17.57 are consistent.

The adoption of these recommendations will result in less ambiguity and greater consistency within the industry.

In conclusion, Crown Castle welcomes the opportunity to comment and fully supports the requests for amending Part 17 that are contained in PCIA's petition for rulemaking.

Respectfully Submitted,

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Monica Gambino  
Vice President, Legal &  
Associate General Counsel

Sheldon Moss  
Director, Government Affairs

Crown Castle USA, Inc.  
2000 Corporate Drive  
Canonsburg, PA 15317  
(724) 416-2000

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